

ABSTRACT OF THE DISCLOSURE

The present invention provides: a fixed-bed shell-and-tube reactor, which can stably produce an aimed product for a long period when a solid particulate material such as a catalyst is packed and used for each substance; and its usage.

- 5 The fixed-bed shell-and-tube reactor comprises a plurality of reaction tubes that are packed with a solid particulate material and arranged in parallel, wherein the solid particulate material is weighed so as to be uniform volume, and is packed in each reaction tube in a packing time of not shorter than 30 seconds per liter.